OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
RAM 1216
Component
Diesel Engine
Fluid
CHEVRON 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

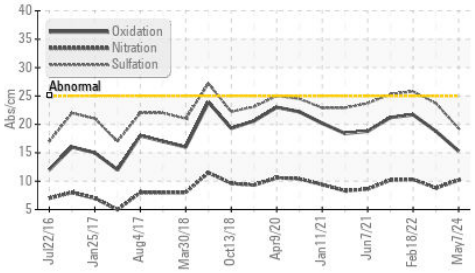
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

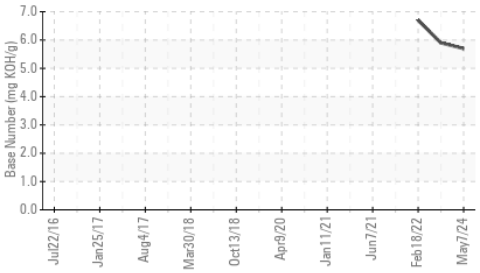
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0924602**	WC0689141	WC0639401
Sample Date		Client Info		**07 May 2024**	11 Jul 2022	18 Feb 2022
Machine Age	mls	Client Info		**250874**	225430	318077
Oil Age	mls	Client Info		**0**	0	9785
Filter Age	mls	Client Info		**0**	0	9785
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>130	**22**	23	26
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	<1	0
Titanium	ppm	ASTM D5185m	>2	**<1**	<1	0
Silver	ppm	ASTM D5185m	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185m	>20	**8**	7	7
Lead	ppm	ASTM D5185m	>20	**0**	<1	<1
Copper	ppm	ASTM D5185m	>125	**4**	<1	1
Tin	ppm	ASTM D5185m	>4	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**4**	5	5
Potassium	ppm	ASTM D5185m	>20	**15**	22	27
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>6	**0.3**	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	**10.2**	8.8	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	**19.3**	23.7	25.8
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185m	>50	**3**	4	5
Boron	ppm	ASTM D5185m		**46**	184	197
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**80**	76	81
Manganese	ppm	ASTM D5185m		**1**	<1	<1
Magnesium	ppm	ASTM D5185m		**39**	375	443
Calcium	ppm	ASTM D5185m		**2249**	1354	1480
Phosphorus	ppm	ASTM D5185m		**1033**	872	898
Zinc	ppm	ASTM D5185m		**1227**	1104	1065
Sulfur	ppm	ASTM D5185m		**4075**	3371	2485
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.3**	18.8	21.7
Base Number (BN)	mg KOH/g	ASTM D2896		**5.7**	5.9	6.7
Visc @ 100°C	cSt	ASTM D445	14.4	**13.9**	12.9	13.2

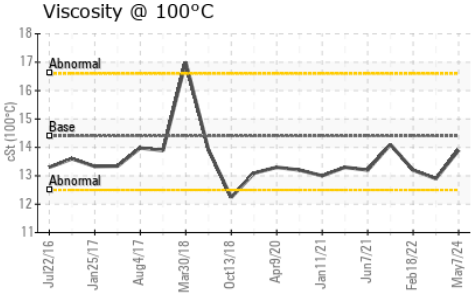
FT-IR (Direct Trend)



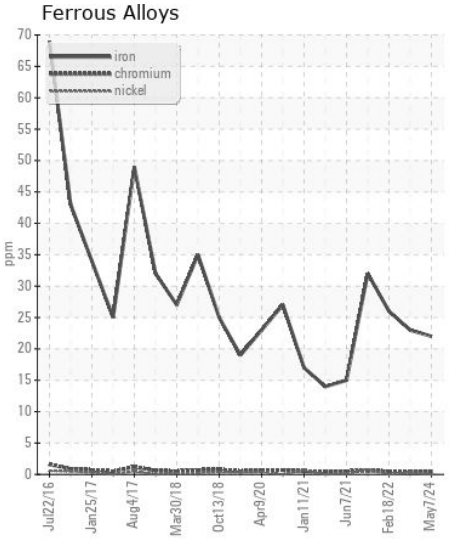
Base Number



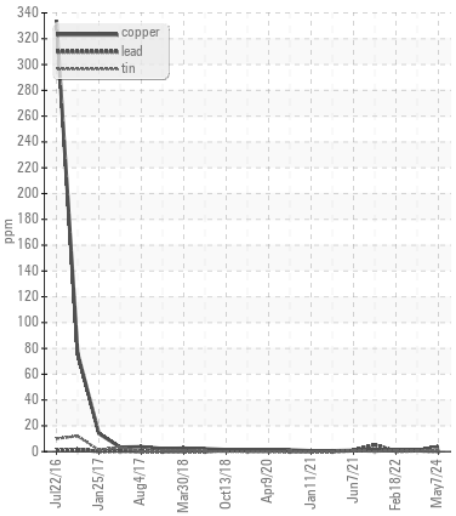
Viscosity @ 100°C



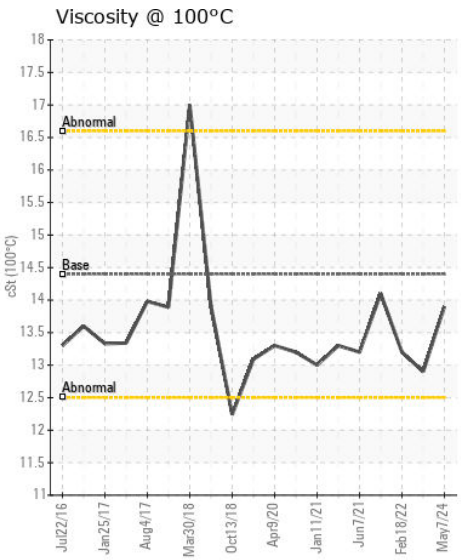
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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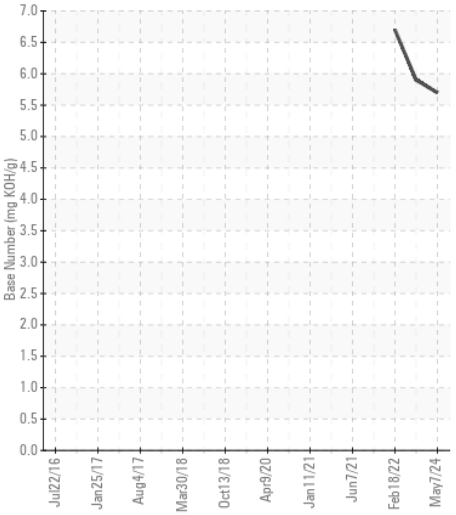

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0924602
Lab Number : 06176756
Unique Number : 11022809
Test Package : CONST (Additional Tests: TBN)

Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 14 May 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

SULLIVAN EASTERN INC
2860 C SLATER RD
MORRISVILLE, NC
US 27560
Contact: SCOTT SULLIVAN
ssullivan@sullivaneastern.com
T: (919)484-8993
F: (919)484-2136